

**PROSPECTIVE ROLE OF
MORTGAGE INSURANCE IN
SUPPORT OF HOUSING
FINANCE IN POLAND**

Prepared for

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East European Regional Housing Sector Assistance Project
Project 180-0034
U.S. Agency for International Development, ENI/EEUD/UDH
Contract No. EPE-C-00-95-001100-00, RFS No. 601



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September 1998
UI Project 06610-601

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LIST OF ACRONYMS

BBB	Bankers' blanket bond
DIM	Dual-index mortgage
LTV	Loan-to-Value
MI	Mortgage Insurance
MBS	Mortgage-backed security
PBA	Polish Banks Association

ABSTRACT

The objective of this paper is to assess the development of insurance products relevant to real estate lending in Poland, and in particular to provide an analysis of the relevance and feasibility of mortgage default insurance to the current and evolving mortgage industry in Poland. The report also includes a brief discussion of several other mortgage-related insurance products which appear ripe for more immediate adoption or broader usage in Poland. Mortgage default insurance may be able to play a useful future role in Poland as the nation's housing finance sector develops and matures, especially by enhancing affordability for more prospective homebuyers and supporting the development of a private secondary mortgage market by helping to build investor confidence.

PROSPECTIVE ROLE OF MORTGAGE INSURANCE IN SUPPORT OF HOUSING FINANCE IN POLAND

EXECUTIVE SUMMARY

Mortgage banking is growing rapidly in Poland, with an increasing number of banks entering the market. Similarly, the legal, administrative, and regulatory framework within which the sector is evolving is rapidly maturing. At the same time, the insurance industry in Poland is maturing and becoming a topic of increasing interest; the Insurance Industry Act is now being reviewed and discussed.

Insurance products related to mortgage lending, however, were not relevant to the previous system in Poland and have not yet evolved in any major way in the reformed system. The Polish Banks Association and other interested parties would like to assess the development of insurance products relevant to real estate lending. This study takes a first step to assist in this effort by providing an analysis of the relevance and feasibility of mortgage default insurance to the current and evolving mortgage industry in Poland. The report also includes a brief discussion of several other mortgage-related insurance products which appear ripe for more immediate adoption or broader usage in Poland.

Summary of Findings

Mortgage default insurance may be able to play a useful future role in Poland as the nation's housing finance sector develops and matures. Possible future roles include: (1) enhancing affordability by enabling more prospective homebuyers to finance their purchase with less cash savings and/or higher payment burdens; and (2) supporting the development of a private secondary mortgage market by helping to build investor confidence with a form of credit enhancement of proven effectiveness in a number of mature markets.

The launching of a privately sponsored mortgage insurance program in the very near term, however, would seem to be premature for two reasons:

First, the primary mortgage market in Poland has not yet achieved either the volume or the type of standardized information flow and administrative efficiency needed by a mortgage insurer to introduce cost-effective mortgage insurance and

Second, the current primary causes of Poland's housing affordability problems do not appear to be ones that would be significantly ameliorated by mortgage default insurance.

Affordability

In countries where mortgage default insurance now serves the mortgage market, the insurance is viewed as contributing significantly to the borrower's ability to afford a home. In the U.S., for example, privately sponsored mortgage insurance is written on about one in seven homes, with comparable government sponsored mortgage insurance programs covering a roughly equal additional share of home loans. Mortgage default, or guarantee, insurance protects against lender loss stemming from borrower default accompanied by insufficient recoverable value in the property securing the insured loan. Mortgage insurance (MI) operates, first and foremost, through reducing the amount of cash downpayment (equity) that a borrower must provide. Secondly, mortgage insurance may be used to increase the allowable (acceptable to the lender) payment burden.

In Poland at the present time, many would-be borrowers' incomes are too low to qualify for affordable conventional financing, especially given the relatively high home prices and double digit interest rates. The present use of the dual-index mortgage (DIM) instrument offers an interim vehicle to make financing terms more affordable in Poland, but the DIM device itself signals an unstable financing and, therefore, a difficult underwriting environment for mortgage default insurance.

As greater stability and maturity are achieved in Poland's financial and mortgage markets over the next few years, mortgage default insurance in Poland could be used to expand loan demand, at least for that upper-middle segment of the market consisting of upwardly mobile couples for whom incomes and borrowing capacity are less of a problem relative to home asking prices. The desire of these would-be buyers to purchase a home precedes their accumulation of the 40 to 50 percent cash down payment normally required by Polish lenders. Some Polish banks are apparently already accommodating this small, but growing market, offering loan-to-value ratios as high as 75 to 80 percent. Instead of using mortgage default insurance, however, such transactions at present generally are enhanced in Poland by other, less efficient, means, such as third party guarantees provided by strong, creditworthy individuals.

Mortgage default insurance, possibly preceded by credit-enhanced mortgage banking intermediation, should be considered a potent tool both for attracting housing rehabilitation funds and for stimulating new production. While housing rehabilitation has not been a primary use of mortgage default insurance in other countries, both government and privately sponsored mortgage insurance programs directed at home improvement financing have been written in large volumes in the United States. Underwriting profitability and efficiency for this type of insured mortgage financing have been somewhat more difficult to achieve for a variety of reasons, but none that should serve to deter its development and use in Poland when the time and conditions are right.

As Poland's housing and mortgage markets develop and stabilize, mortgage default insurance by underwriting significantly higher loan-to-value (LTV) ratios, and possibly somewhat higher payment burdens should be considered a potentially useful tool in making home purchase financing more affordable in an expanded market.

Establishing and Pricing Mortgage Insurance

If mortgage default insurance were to be made available in Poland, either now or in the foreseeable future, what would it cost and who would bear that cost? What factors in the current structure and operation of the mortgage market, or in government policies, need attention in order to facilitate establishment of mortgage insurance?

Mortgage default insurance, as a prospective new private sector enterprise in Poland, would represent an entirely new concept, as opposed to, say life or automobile insurance, where state-owned enterprises have been privatized and new private competitors also have begun to emerge. Not only would mortgage insurance itself be a new concept for Poland, but the underlying risk that MI is designed to protect against lender loss by reason of borrower default and foreclosure on a mortgaged home would also be a new concept.

In other countries where private mortgage insurance has been introduced successfully over an extended period of years, the general pattern has been a government-sponsored precedent. The key to pricing any insurance product, of course, is to have some relevant empirical experience upon which to gauge the prospective risk. Years of government-sponsored mortgage default insurance experience provided such a precedent for private startups, for example, in the U.S., Canada and Australia. An alternative source of risk experience that might offer some foundation for estimating the prospective cost of mortgage insurance in Poland is the direct risk experience of Poland's mortgage lenders. Because mortgage risk patterns require a number of years to unfold, however, a useful experience base for costing out a new mortgage insurance program probably would require five years or more of well recorded mortgage risk experience on the part of Poland's mortgage lenders. Currently, this type of mortgage experience database does not yet exist in Poland.

From the perspective of the information needed to estimate risk and price mortgage insurance, current mortgage operations in Poland have a number of short-comings, including: (1) insufficient data to calculate risk profiles; (2) uncertainties and/or delays in determining title and lien priorities; and (3) a costly and/or unpredictable foreclosure process. With further administrative improvement in these areas, however, the benefits in terms of expanding affordability should begin to outweigh the cost of providing mortgage default insurance.

Key recommendations for improving the functionality of the primary market, and therefore for creating an environment more conducive to the establishment of a privately capitalized mortgage insurance program include:

Early collaboration among bankers to establish an agreed-upon method for collecting the type of loan-level data needed to measure and track mortgage risk experience;

Further work toward the adoption of general underwriting and documentation standards for home mortgages;

Further progress in the nationwide collection and dissemination of useful local housing market data, particularly on individual home sales;

Further progress toward establishing efficient, widely accessible credit reporting facilities;

The written agreement between the prospective buyer and seller, describing the property being sold and the agreed-upon terms of the sale, including the sale price, should be made a part of the lender's total loan package. The Polish Banks Association may wish to consider collaborating with the association representing real estate sales agents to seek to establish such a document in some standardized form, or at least to include certain standardized information about the intended sale;

A concentrated effort to improve the efficiency and general public acceptance of both foreclosures and evictions in the event of borrower default;

An evaluation of how to best to provide investors with the type of protection offered by title insurance; and

Further governmental and regulatory attention to strengthening, and making consistent among all market participants, the lien priority for holders of purchase money residential mortgages.

Regulation and a Potential Government Role

The regulatory environment for banking and insurance appears to be quite well developed, especially given its short history. A private mortgage insurance business, however, should operate under some specially designed regulatory provisions that ought to precede the launching of such an enterprise most importantly a special set of risk-based capital rules. Likewise, mortgage insurance would be better able to serve the market if risk-

based capital banking regulations were to expressly recognize the lower risk of bank loans that carry mortgage default insurance. This paper addresses how the National Bank of Poland might promulgate risk-based capital rules for home mortgages in a way which recognizes the potential for qualified mortgage insurance to expand loan-to-value ratio criteria, thereby increasing housing finance activity without increasing risk to direct lenders.

As noted above, government supported (or sponsored) mortgage insurance has played an important role in setting a framework for mortgage insurance (and in a number of countries, including the U.S., still plays a direct role in housing affordability). Given the current pressure on budgetary resources, the national government in Poland may not immediately be in a position to assume a direct, activist role in undertaking the provision of mortgage insurance. Recognizing these limitations, policymakers might consider a more limited government role, such as reinsurance, until such time as private mortgage insurance may be offered and/or the Government wishes to consider a publicly-supported mortgage insurance program.

This report does not expressly recommend a role for government in underwriting mortgage default risks, either directly or through reinsurance, nor would such a role for government be advisable as an immediate first step to improve the workings of Poland's mortgage markets. The key observation here is that some form of government-sponsored catastrophic reinsurance might accelerate the estimated five year time frame that probably will be needed to establish the experience base for starting up a privately sponsored mortgage insurance enterprise.

Given the uniquely long-term risk assumed under each mortgage default insurance policy issued (relative to other forms of credit insurance), and given that mortgage default risks are essentially catastrophic risks driven by macroeconomic events, the underlying capital reserves needed to support such risks needs to be based upon the aggregate contingent risk outstanding at any given point in time. It is thus recommended that this type of special risk-based minimum capital requirement ought to be established under Poland's insurance regulation as a prerequisite to authorizing the writing of mortgage default insurance risks in Poland.

Other Mortgage-Related Insurance Products

While Poland is not immediately ready for mortgage default insurance, the mortgage finance situation in Poland does seem ripe for the introduction, or significant expansion, of several other mortgage-related insurance products. The following lines seem especially promising in this regard: (1) mortgage redemption life and disability insurance; (2) banker's blanket bond (BBB) coverage; and (3) mortgagor's (builder's) performance bonding. These mortgage-related insurance products will help lenders, borrowers and mortgage investors control their risks. Mortgage redemption life and (optional) disability

insurance is a form of personal lines coverage which protects both borrower and lender in the event that the breadwinner head (or heads) of the mortgagor's household dies or suffers long term disability. The banker's (mortgage bank's) blanket bond, commonly referred to as BBB, comprises several combined types of coverage which may be tailored to suit a variety of specialized lender needs. Its key features are errors and omissions coverage, which protects against losses suffered by third parties as a result of mistakes or failures to act as required under established bank procedures, and fidelity coverage, which protects the bank and its customers and clients against losses caused by dishonest or fraudulent acts of employees, and possibly others working on the bank's behalf. BBB coverage provides a blanket coverage in the event that any specifically required mortgage-related types of coverage are, for whatever reason, allowed to lapse. A mortgagor's (builder's) contract performance bond is a surety product which, unlike a bank letter of credit or other forms of financial guarantee, insures the specific performance of all obligations under an outstanding construction contract; if the building contractor defaults, the surety will step in and complete the project and will help to control the loss exposure for both lenders and investors.

1. INTRODUCTION

Poland has recently experienced greatly increased interest in mortgage financing for the purpose of developing, purchasing and improving individually owned homes and flats. The Polish Banks Association (PBA) has expressed an interest in the possible use of mortgage default insurance to support the further development of this emerging market sector.

Currently, mortgage-related insurance products are not yet part of mortgage lending in Poland. Taking a forward-looking approach, the Polish banks want to be sure that ongoing regulatory and market reforms in both the mortgage banking and insurance sectors are shaped to accommodate the types of mortgage-related insurance products that may, in the future, fulfill specific needs of mortgage borrowers, mortgage lenders, and potentially, secondary mortgage market investors.

In this context, several inter-related tasks have been undertaken by the Urban Institute Consortium for USAID's Housing Finance Program on behalf of the Polish Banks Association. These include:

- Preparation of two reports providing an overview of mortgage-related insurance products in the U.S. and in other developed markets, with an emphasis on mortgage default insurance. These reports were translated and provided to the PBA prior to the trip to Poland noted below. They are now included in this report as Annexes B and C;

- Travel to Poland to meet directly with mortgage lending, insurance, and other key individuals in related activities in Poland and, thereby, to help identify risks, opportunities and impediments relating to the potential development of mortgage-related insurance for housing in Poland;

- Conduct an informal workshop with a small group of banking and insurance managers in order to advance further the understanding of the above-referenced opportunities and impediments associated with mortgage-related insurance for housing in Poland; and

- Preparation of a final report containing observations about the prospective development of mortgage default insurance for housing in Poland, together with a more abbreviated commentary on conditions and prospects for the introduction of other mortgage-related insurance products.

This paper constitutes the final report. As noted above, the two earlier reports prepared by the author *The Role of Insurance in Home Mortgage Finance in the United States* and *A Brief Overview of Mortgage Insurance in Other Countries* are attached as Annexes B and C and should be considered integral parts of the overall commentary on mortgage-related insurance. Thus, for background detail on mortgage default insurance

and related insurance lines as they are used outside of Poland, readers should refer to these two reports.

The balance of this report is organized as follows:

Section 2 deals with the critical question of housing affordability in Poland at present: how lenders are attempting to deal with a daunting affordability gap between present personal income levels and current home prices and financing terms. The ways in which mortgage default insurance might, and might not, alleviate specific affordability concerns are discussed.

Section 3 identifies several insurance regulatory concerns which may need to be addressed in the context of Poland's current Act on Insurance Activity in the event that mortgage default insurance were to be made available to Polish banks and mortgage bankers. Section 3.0 also addresses how National Bank of Poland might promulgate risk-based capital rules for home mortgages in a way which recognizes the potential for qualified mortgage insurance to expand loan-to-value ratio criteria, thereby increasing housing finance activity without increasing risk to direct lenders.

Section 4 sets forth the specific variables that would determine the cost and price of a mortgage default insurance product as it might be offered in Poland. Examples are offered which illustrate the wide range of potential premium rates that might have to be charged, based upon an assessment of how well Polish housing and mortgage markets are working today, or are likely to be working in the immediate future.

Section 5 sets forth a listing of basic preconditions that would need to exist for a mortgage default insurance program to succeed and fulfill the role expected of it by lenders and investors who would be its policyholders and direct beneficiaries. These are preconditions, which would apply to Poland as well as to the housing finance sector of any other advanced, developing private financial services marketplace. Section 5 also includes a practical discussion of certain risks associated with the home mortgage purchase transaction in terms of the roles, incentives, relationships, and ongoing accountability of the various parties to the transaction.

Section 6 introduces special and additional insurance-related considerations that are peculiar to the prospective development of a secondary mortgage market, which is a dominant feature of the U.S. market and which could ultimately emerge in Poland. While important contrasts are drawn between primary and secondary market mortgage insurance needs and options, the common preconditions applicable to both also are emphasized.

Section 7 offers conclusions and a prospective outlook regarding mortgage default insurance in Poland, including a roadmap of sorts suggesting a possible sequencing of

policy and market initiatives which could lead to circumstances in Poland where mortgage default insurance could fulfill its intended role of growing and protecting Poland's home mortgage market. This section also contemplates what type of limited government support for a mortgage default insurance program might be useful and possible, given the restraints against any immediate budgetary allocations by the national government to subsidize mortgage insurance. Finally, Section 7 extends the discussion explicitly to several other lines of mortgage-related insurance. While the earlier papers described many insurance lines which support home financing internationally, this final discussion singles out those few which, based on the recent interviews in Poland, seem most ripe for immediate or very near term adoption by current market participants, including both bankers and insurance providers.

2. HOUSING AFFORDABILITY AND MORTGAGE INSURANCE

In countries where mortgage default insurance serves the primary mortgage market, its role is to contribute, often significantly, to the borrower's ability to afford a home purchase. Mortgage insurance (MI) operates, first and foremost, through reducing the amount of equity (cash downpayment) necessary in a typical loan situation in the absence of such insurance. Secondly, it may be used to allow an increase above the typical/normal ceiling for (net) payment burden (the proportion of income that must be utilized to pay the mortgage). These concepts are further discussed below.

Mortgage Insurance and Loan-to-Value Ratios

The basis for this enhancement of affordability, however, rests almost exclusively with the ability of mortgage default insurance to substantially reduce the amount of cash required of the borrower in the form of a down payment. In other words, where the affordability barrier is mainly attributable to the borrower's inability to accumulate sufficient cash to meet the lender's maximum loan-to-value ratio limit, then mortgage default insurance may serve to substitute for a large part of the cash equity cushion normally required of the borrower. This situation is exhibited in *Exhibit 1*.

Under these circumstances, the use of mortgage default insurance to reduce cash equity requirements is accompanied by a correspondingly higher amount of borrowing by the home purchaser. This, in turn, inevitably produces a higher monthly debt burden for the borrower. In fact, the inability to save a sufficiently large down payment is not the only affordability barrier for the typical home purchaser. At the current time in Poland, probably to a greater extent than in the US and other countries where mortgage default insurance is widely used, additional affordability barriers are the following:

Insufficient household incomes in relation to prevailing prices of available homes

and flats. Selling prices for standard sized new dwellings in Poland have been reported to be eight to ten times the Polish household s average annual income, a multiple that is more than double that which is prevalent in Western Europe and North America.¹ To the extent that the ratio of prevalent home prices to household incomes improves in Poland, as at least one just-released study suggests, the size of the market segment that might benefit from mortgage insurance availability expands accordingly.²

High interest rates, with real rates charged on home mortgages still exceeding 10 percent and nominal rates exceeding 20 percent. Double digit interest rates mean that the prospective mortgage carrying charges for financing even 50 percent of the total home price are quite likely beyond the carrying capacity of most Polish families.

Housing Research Institute. *Housing Problems* , 1997.

Mayo, Stephen. *Land Markets, Prices and the Economy*. Lincoln Institute of Land Policy (July 1998).

EXHIBIT 1

One financing method that is being employed by some Polish bankers to alleviate this affordability squeeze is the use of the so-called dual index , or DIM mortgage instrument, whereby a portion of the monthly mortgage carrying charge may be deferred and capitalized as part of the future outstanding loan balance in order to reduce the current monthly payment amount.³

What does this mean with respect to the potential use of mortgage default insurance for the purpose of enhancing housing affordability and thereby increasing the demand for mortgage financing and housing in general? For the immediate future, mortgage default insurance in Poland is not likely to be a particularly useful tool for making housing more affordable for most Polish households because this specialized insurance does not address broader issues of financial market stability, home prices, or household incomes. Several years hence, however, the broader lending environment may be more conducive to the introduction of mortgage insurance and the realization of the particular affordability benefits it is designed to confer.

If current conditions were more conducive, mortgage insurance availability in Poland would expand loan demand immediately for that limited segment of the market at or near the upper end among young, upwardly mobile couples for whom asking prices for homes and flats are feasible for their incomes and borrowing capacity. The desire of these would-be buyers to purchase a home precedes their accumulation of the normally required 40 to 50 percent cash down payment.

Reportedly, some Polish banks already are accommodating this small, but growing, market, offering loan-to-value ratios as high as 75 to 80 percent. Instead of using mortgage default insurance, such transactions typically are augmented by third party guarantees provided by strong, creditworthy individuals. In the long run, if a standardized and highly rated mortgage default insurance policy was generally available and accepted, individual third party guarantees would probably tend to be replaced. Thus, based on U.S. experience, home builders and lenders seeking to develop their businesses almost certainly would prefer standard mortgage insurance to serve this need, were such a product to be made available.

As noted elsewhere in this report, however, there are questions as to whether the overall market environment in Poland at present is sufficiently conducive to the successful establishment of a mortgage default insurance program. And the elite segment that could possibly make near-term use of MI may not be large enough to generate the type of insurance volume needed to justify launching such a program.

In countries where mortgage insurance is widely used to enhance home

³ Chiquier, Loic. *Dual Index Mortgages (dimgs): Conditions of Sustainable Development in Poland*. Prepared for USAID Warsaw (February 3).

affordability regardless of whether such insurance is government or privately sponsored such programs are directed at a large group of moderate-to middle-income households. As potential first-time homeowners, these creditworthy households have adequate incomes to carry mortgage balances equal to a high percentage of the total home purchase price, but without mortgage default insurance, they lack sufficient cash to qualify for bank financing under prevailing underwriting standards. Such a situation should eventually evolve in Poland as the housing market matures, but these circumstances probably do not currently prevail.

Mortgage Insurance and Payment Ratios

Mortgage default insurance might also prove useful to address a different type of affordability problem, namely in a situation where mobile borrowers are willing to devote a larger share of their income toward prospective mortgage payments than the limits being imposed by some lenders. Mortgage default insurance could help induce lenders to expand the envelope of their traditional underwriting criteria with respect to the maximum housing payment burden.

In the U.S., a secondary use of mortgage insurance in recent years has been to help encourage higher payment burden ratios for the lowest income range of potential first time homebuyers. This alternative potential use for mortgage insurance in Poland may eventually help expand affordability at the margin. But with currently prevailing mortgage instruments permitting substantial payment variability, there would seem to be little room for immediate further increases in permissible housing payment burdens at the point of initial underwriting.⁴

3. INSURANCE AND BANKING REGULATORY CONSIDERATIONS

Insurance

A review of several key documents on the insurance market in Poland was undertaken to identify what, if any, issues might arise at such time as a non-government sponsor in Poland might seek to initiate a mortgage default insurance program.

In countries where mortgage insurance has developed as a private sector enterprise, the need for some special regulatory attention has been recognized to varying

Regarding housing affordability, the larger dimensions of this difficult issue in Poland are beyond the scope of this report. Steps to add affordability that would precede the introduction of mortgage default insurance, however, would most likely include: a reduction in mortgage rates through the further easing of inflation; a reduction in the basic costs of making mortgages; an increase in the supply of available housing at competitive prices through the more rapid release of buildable land in populated areas; and increasing competition and efficiency of home builders.

degrees. Special regulation of private mortgage insurance is the most fully developed in the United States, where the insurance industry is regulated by the 50 individual states, and not by the national government. The industry was greatly affected by a period earlier this century during which regulation of the industry was severely inadequate.

For several decades prior to the Great Depression of the 1930 s, a thriving mortgage default insurance industry served both direct mortgage lenders and a secondary mortgage market in the U.S.⁵ By 1933, all 18 New York-based mortgage insurance firms had become insolvent. Thousands of individual and institutional holders of insured mortgage investments suffered severe losses.

The New York State insurance regulator in 1934 issued a comprehensive *post mortem* report on the demise of the mortgage default insurance industry. Key findings, many of which served as the basis for subsequent and current regulations and practices, cited the following causes of the industry's collapse:

- Inadequate and inappropriate insurance loss reserves;
- Inadequate property appraisals;
- Conflicts of interest between originators and insurers of mortgages;
- Excessive and unsound real estate and mortgage investments held by mortgage insurers; and
- Inadequate supervision.

Given that this type of insurance is intended to protect against economic catastrophe, in addition to more normal or random losses associated with mortgage default, the severity of the Great Depression (i.e., in terms of unemployment and falling home prices) should not have caused such a total collapse of these insurers. Since the 1960 s, in fact, when the private mortgage insurance industry was revived, the standard for measuring the financial solidity of individual mortgage insurance firms has been based upon simulations ever more sophisticated of so-called Depression level losses and their projected effect upon mortgage insurers' balance sheets and claims paying capacity.

Key features of current regulations specially applicable to mortgage default insurers generally includes the following in some form:

Monoline restriction. Under this restriction, mortgage insurers are required to be chartered to conduct this particular line of business separately from all other lines. Alternatively, strict segregation of mortgage insurance capital reserves from reserves for other lines of business may be required. Such segregation would also apply to reinsurers of catastrophic risks that are inherent to the mortgage insurance product.

Secondary market is defined as the purchase and sale of mortgage assets, including individual and pooled mortgages and mortgage-backed securities. The secondary market does not include the use of bonded debt to fund mortgage lending.

Minimum capital requirement tied by formula to total risk outstanding. The mortgage insurer's total capital reserves must increase proportionately with the total amount of contingent risk underwritten and outstanding. Contingent (i.e., statutory) risk in force for mortgage insurers is a function of the total insured loan amount outstanding (or a percentage thereof, depending on actual policy terms and conditions). Mortgage insurers' risk-based capital requirements may also vary with loan-to-value ratio, with a higher percentage of capital required to support financial risks associated with higher loan-to-value credits. Such risk-based capital requirements resemble that of a modern bank more than those of a traditional insurance company, in that mortgage insurer reserves do not relate by formula to premiums written or claims experience, but rather to the equivalent of minimum bank equity relative to total outstanding credits. The actual method for establishing minimum risk-based capital for mortgage insurers varies from country to country, but the principle is consistent to the extent that this method for establishing minimum regulatory reserves differs from that of other standard insurance lines.

Conflict of interest restrictions. Mortgage insurers are not permitted to be owned or controlled by banks or other institutional mortgage lenders, or, if so owned or controlled, are restricted in terms of their ability to guarantee the repayment of loans originated by parent or affiliated lending institutions.

In addition, regulatory provisions are commonly found which prohibit rebates, commissions, or other financial inducements to be offered by a mortgage insurer as a means of persuading a mortgage lender to place its insured loan business with that insurer. For example, while lenders may, in some regulatory environments, act as a commissioned insurance agent for the placement of personal lines of life and casualty insurance purchased by their borrowers (e.g., homeowners fire and liability), such a relationship is widely viewed as a conflict of interest in the instance of mortgage default insurance.

Whereas independent underwriting is not a concern for these other personal risks (because the bank does not directly control such risks on the part of its customers), such underwriting independence by mortgage insurers is critical to their long term viability because the profile of mortgage default risks is largely determined by the originating lender/mortgage insurance policyholder.

Other secondary items which may be found in mortgage default insurance regulations include: (1) maximum permissible loan-to-value ratios; (2) a requirement that eligible insured lenders must be regulated or supervised institutions; and (3) a requirement that the construction of properties eligible to secure insured mortgages must be complete.

In the U.S., the National Association of Insurance Commissioners (NAIC) has promulgated a special Model Act governing the business of mortgage default insurance.

Many individual states have adopted this Model Act, which includes provisions covering the above-referenced considerations applicable to mortgage default insurance. A copy of the NAIC Model Act appears as Annex A.

Based on a review of Poland's general insurance regulation with an eye toward special mortgage default insurance regulatory considerations, the following observations are offered:

Monoline. Poland's current insurance regulation does not appear to provide for the so-called monoline aspect of mortgage default insurance regulation, a type of specialized insurance charter. To achieve the regulatory purposes of a monoline restriction, however, Poland would not necessarily need to enact such a provision. As an alternative, Polish insurance regulators could recognize the uniqueness of mortgage default insurance risks by requiring that an insurance applicant in this new line of business reflect in its required business plan its intentions to segregate this line in particular its reserve accounts from other unrelated risks. The same criteria should apply to reinsurance, both in terms of any capital relief given to the direct insurer for the placement of reinsurance, and also with respect to the regulatory criteria for qualifying reinsurers to assume mortgage default insurance risk.

Regarding monoline regulatory concerns, the matter of state-sponsored guaranty funds bears mentioning. In the U.S. all 50 states have some form of state insurance guaranty fund, whereby policyholders of insolvent insurance firms are protected. It is noteworthy that in the U.S., where mortgage default insurance is written on about one of every seven homes financed nationwide, the state insurance guaranty funds universally exclude mortgage default insurers and their policyholders from participation in such funds. Losses arising from insured home mortgage defaults, in the event of a national economic depression, are considered to be so potentially devastating that state legislators and insurance regulators have concluded that other insurance lines covered by their state guaranty funds must be shielded from the catastrophic risks associated with mortgage default insurance.

Risk-based capital. Poland's national insurance regulation governing minimum guarantee capital does recognize the special risks attendant to all forms of credit insurance by defining credit insurance as a separate line and assigning it higher minimum capital requirements than other established lines. However, Poland's regulation applicable to credit insurance (to which line mortgage default insurance is most closely related) currently does not provide for the type of risk-based minimum guarantee capital concept as described above. Other than the higher minimum absolute threshold amount of capital required for a credit insurer, Poland's regulatory formula for determining ongoing minimum capital reserves for credit insurers is driven by premium writings and claims factors, rather than by aggregate risk outstanding.

As noted earlier, a special risk-based minimum capital requirement ought to be established under Poland's insurance regulation as a prerequisite to authorizing the writing of mortgage default insurance risks in Poland. Given the uniquely long-term risk assumed under each mortgage default insurance policy issued (relative to other forms of credit insurance), and given that mortgage default risks are essentially catastrophic risks driven by macroeconomic events, the underlying capital reserves needed to support such risks needs to be based upon the aggregate contingent risk outstanding at any given point in time.

Conflict of interest. Poland's insurance regulation does not appear to contain the type of conflict of interest restrictions i.e., relating to ownership and control and to various financial inducements that are operative in most countries having established mortgage default insurers. While such provisions ultimately may be desirable to have within the regulation itself, it is possible that Poland's regulators could exercise the needed controls in these areas administratively via the screening and enforcement of explicit limitations contained in the applicant's approved business plan.

Underwriting and appraisal standards. Matters relating to responsible underwriting (e.g., appraisal standards) need not be embedded in special insurance regulations. However, to the extent they are not embedded, it would be desirable to have the means of requiring mortgage default insurers to assume risk only from institutional lenders who are regulated and supervised with regard to their standards for extending mortgage credit.

Technical reserves. Mortgage insurance regulations, particularly in the U.S., spell out a variety of special requirements applicable to particular reserves known in Poland as technical reserves. For example, when insured loans are reported in default to the insurer, specially classified technical reserve accounts must be set up for defaults not yet in foreclosure, cases in the process of foreclosure, and cases where foreclosure has been completed but a claim has not yet been submitted. All of these loss reserve accounts are liabilities on the statutory balance sheet. In addition, U.S. regulations require a special long-term contingency reserve equal to 50 percent of all earned premiums to be set aside to cover potential economic catastrophe (as another example, this figure is 25 percent in Australia). This contingency reserve normally is treated not as a balance sheet liability, but rather as a restricted segregation of the insurer's surplus account.

While all of these special regulatory provisions may be desirable, it is felt that none of these would be absolutely necessary to adopt as part of Poland's insurance regulation in order for mortgage guaranty to function on a sound basis in the future as long as the fundamental risk based capital requirements as described below were enacted and in

place. Regarding special reserving practices for various categories of loan defaults, Poland's current insurance regulation seems to permit the insurance supervisor considerable latitude in requiring appropriate technical reserving practices and provisions pursuant to each insurer's business plan and the types of risks being assumed over time.

Geographic risk concentration. Dispersion of risk over a wide geographic area and among many different markets is crucial for a mortgage insurer to achieve. By their nature, in the absence of a national depression, local and regional housing markets tend to experience different cycles, depending on what industries and services predominate, as well as the ever-shifting balance between housing supply and demand. While U.S. mortgage insurers are subject to specific restrictions as to maximum risk concentration in a single market area or in single or contiguous housing developments, other countries' regulations are not so specific. By whatever means, the regulator needs to keep a watchful eye for the buildup of excessive, locally concentrated risk exposure.

Investments. Mortgage default insurance risk is inextricably tied to the value of residential real estate as pledged to secure home mortgage loans. Accordingly, there is good reason for mortgage default insurers to be restricted from holding capital reserves assets which are in the form of mortgages or real estate. A case can be made that the only real estate or mortgages that mortgage default insurers ought to hold are facilities directly used for company operations and real estate and mortgage loans which are acquired in the normal course of business through the settlement of insurance claims.

Banking

Mortgage default insurance is especially susceptible to the dangers of adverse selection of risk by the lenders who purchase it. So much so that, in the absence of some broad or blanket standard defining when mortgage insurance is to be used, a mortgage insurance program is unlikely to be viable under circumstances where lenders choose, case by case, which loans to insure and which loans to self-insure.

There are two basic ways to establish a system whereby adverse risk selection against mortgage default insurers may be avoided. The first way to achieve this objective would be through a direct banking regulation. For example: *All loans made by regulated lenders and/or sold to regulated investors must carry mortgage default insurance whenever the loan-to-value ratio exceeds xx percent.* The second way would be via properly designed financial incentives for banks and other regulated lenders. For example: *Risk-based regulatory capital requirements will be reduced from 100 percent to 50 percent (or a lower requirement) for all home mortgage loans exceeding xx percent loan-to-value ratio if such loans carry qualified mortgage insurance.*

There are probably more examples of regulatory mandates than risk-based

incentives for the use of mortgage insurance. U.S. federal housing legislation, for example, mandates the use of mortgage insurance for home loans exceeding 80 percent loan-to-value ratio whenever such loans are sold in the secondary market through the federally sponsored conduits, Fannie Mae and Freddie Mac. Canadian home loans exceeding 75 percent are routinely required to carry government or private mortgage insurance.

Today, however, a financial incentive rather than a regulatory mandate probably would be the preferable means of positioning mortgage default insurance within a nation's developing housing finance sector that is, assuming mortgage insurance has been determined to be a useful component of the nation's housing finance system.

International risk-based capital standards for financial institutions, applicable under the so-called Basle Accords, recognize the inherently lower risks associated with residential mortgage loans. Individual nations are permitted, but not required, to assign risk weightings for home loans as low as 50 percent of the full eight percent capital standard. National central bank discretion is permitted whereby some classes of mortgage loans may be assigned the more favorable capital standard, while other, higher risk, loans may be required to carry a 100 percent risk weighting.

In the U.S., for example, home loans with loan-to-value ratios of 80 percent or less generally are granted a 50 percent risk-weighted capital requirement. Loans exceeding 80 percent LTV ratio are burdened with a 100 percent capital requirement because of their demonstrably greater credit risk. However, an exception is granted for loans over 80 percent LTV which carry mortgage default insurance from a qualified insurance provider, in which instance the lender making such a high-ratio insured loan benefits from a reduced 50 percent capital standard. (Note that construction-related mortgages and mortgage loans secured by income-producing commercial properties are subject to the 100 percent capital standard.)

The risk-based capital requirement rules must be adopted by each individual country in line with its own risk. For example, a similar utilization of mortgage default insurance is currently under consideration by the central bank authorities in Israel. However, Israel's housing markets and mortgage finance system are less stable than those of the United States, Israel is considering a loan-to-value standard of 60 percent. It considers this standard rather than 80 percent as the triggering point for requiring 100 percent, rather than 50 percent, capital support, and correspondingly for giving equivalent capital relief for the use of qualified mortgage default insurance on loans exceeding the 60 percent LTV benchmark.

Polish regulatory authorities have refrained to date from permitting anything less than the full 100 percent capital standard for mortgages of any kind. As the housing finance sector matures, however, the standard home mortgage will warrant more favorable

risk-based capital treatment. At that time, the National Bank of Poland will have the opportunity to use its authority to adjust capital standards as an incentive to the system to manage its risks most effectively.⁶

In anticipation of the possible future use of mortgage default insurance in Poland, it is suggested that the National Bank of Poland consider allowing for the above type of capital incentive for both universal banks and mortgage banks to use qualified mortgage default insurance in managing their credit risk while encouraging market expansion. Under current circumstances, a conservative (60 percent LTV benchmark, for example) standard for triggering the higher capital requirement and the use of mortgage default insurance might be appropriate. This is illustrated in Exhibit 2.

In the residential sector, for example, it may be reasonable to maintain a full capital requirement for construction loans, uninsured high LTV ratio loans on finished properties, secured loans junior to institutional first mortgages, and mortgages secured by commercial properties. Likewise, it may be reasonable for lower LTV ratio home loans on finished properties and properly insured higher LTV ratio loans to be eligible for significantly reduced capital requirements.

To the extent that the mortgage insurance premium is less than the incremental cost of capital (and also to the extent that the insurance premium cost is more easily passed through to the ultimate borrower), the lender would have a powerful incentive to use mortgage insurance where it is most needed and, conversely, not to burden the borrower with this added cost where it is not needed. At the same time, this type of capital-based incentive would enable the mortgage default insurer to solve the problem of adverse selection of risk by the insured lender, as described earlier.

In order to rationalize risk-based regulatory capital rules for mortgage lenders in the manner described above, it would seem necessary that any baseline set of rules to be adopted would need to be consistent between universal banks and mortgage banks. The new national regulation governing mortgage banks would appear to present two issues in this respect.

First, by granting mortgage banks a somewhat favored lien priority compared to that of the universal banks (with respect to statutory liens), there appears to be an uneven playing field established between the two types of lenders which might lead to the promulgation of more favorable capital rules for mortgage banks. This, in turn, would tend to make more problematic the adoption of rational capital rules that would grant capital relief to banks for the use of mortgage default insurance.⁷

For a discussion of this issue in Poland, refer to William Handorf, *Regulation and Supervision of Real Estate Lending*. Prepared for ID/Warsaw (August 1998).

See Carol Rabenhorst, Jacek Laszek, Tomasz Stawecki, and Klaus Peter Follack, Analysis of Statutory Lien Policy.

Second, the provision of the new mortgage banking regulation which arbitrarily restricts high (over 60 percent) LTV loans to a maximum 10 percent of a portfolio backing mortgage bonds presents a potential impediment to the encouragement of (e.g., insured) high LTV ratio lending in support of an expanded national mortgage market.

It is noteworthy that specialized home mortgage lenders in the U.S. were subject to comparable regulations in the past restricting the percentage of their lending which could consist of high LTV ratio loans. By the early 1980s, all such restrictions had been repealed and are today considered unnecessary, particularly in the context of a standardized national mortgage market where default insurance on high-ratio loans has become an integral part of the widely accepted standards.

Poland may not probably will not emulate the overall U.S. mortgage finance system. But, to the extent that Poland's emerging system shares the goals of liquidity, standardization, and liberal financing terms in order to expand housing affordability, then Polish banking and insurance authorities may want to encourage the growth in a responsible fashion of high LTV ratio financing coupled with the use of mortgage default insurance or some equivalent type of credit enhancement.

EXHIBIT 2

4. MORTGAGE INSURANCE COSTS AND PRICING

If mortgage default insurance were to be made available in Poland, either now or in the foreseeable future, what would it cost and who would bear that cost? There is no definitive answer to the first part of this questions. Still it bears some attention.

Mortgage default insurance, as a prospective new private sector enterprise in Poland, would differ from many other recently emerging private enterprises in Poland. MI would represent an entirely new concept, as opposed to, say, life or automobile insurance, where state-owned enterprises have been privatized and other newly formed private competitors also have begun to emerge. Not only would mortgage insurance itself be a new concept for Poland, but the underlying risk that MI is designed to protect against lender loss by reason of borrower default and foreclosure on a mortgaged home would also be a new concept.

Years of government sponsored mortgage default insurance experience provided such a precedent for private startups in mortgage insurance, for example, in the U.S., Canada and Australia. There is no such experience base in Poland, nor would today s public policymakers or private entrepreneurs in Poland necessarily wish to follow this historical route of other countries.

What, if any, alternative risk experience base might offer some foundation for estimating the prospective cost of mortgage default insurance in Poland? Since the underlying risk arises from the events and outcomes of home mortgage defaults, one might look beyond insurance to the direct risk experience of Poland s home mortgage lenders. Because mortgage risk patterns require some number of years to unfold, however, a useful experience base for costing out a new mortgage insurance program also would require at least five years of well recorded mortgage risk experience on the part of Poland s mortgage lenders. This mortgage experience database does not yet exist in Poland.

Without the precedent of a government-sponsored mortgage insurance experience database, a logical alternative in Poland would be for banks which are active home mortgage lenders to collaborate, beginning immediately, in the establishment of a common database such that all individual home loans originated by the Polish banks would contain a commonly agreed-upon and defined set of loan-level data elements relevant to measuring and understanding the ongoing performance of home loans made to Polish borrowers. With competition keen among individual banks, measures to assure confidentiality would need to be established. The Polish Banks Association, possibly with encouragement from enlightened regulators, would be well positioned to act as the catalyst for such an initiative for the future benefit of all participants.

As to the content of such a prospective mortgage experience database, there is

ample precedent from which to draw upon, including other national mortgage markets, the major international rating agencies, and investment bankers active in the mortgage-backed securities business.

Mortgage default insurance will not reduce the risk or the true cost of that risk with respect to individual loans. In fact, by encouraging higher loan-to-value ratios, MI is more likely to increase the risk of default. *However, by spreading the risk across markets and lenders through the law of large numbers and by imposing a consistent third party underwriting review standard on all loans insured, a well-structured mortgage insurance program can, and should, reduce the risk premium that is actually charged for the credit risk that is shifted from the lender to the mortgage insurer.*

How much might such a mortgage insurance premium be for Polish homebuyers? Clearly it would be higher than currently prevailing rates in the U.S. (3 to 4 percent of the original loan amount), or in Canada (2 to 3 percent of the original loan amount).

Among the reasons for the higher insurance premium costs in Poland would be:

Lack of information on transactions: lack of risk experience data, as noted, and; lack of readily accessible, reliable underwriting data on individual applications; lack of good local housing and related market data; and an uncertain resale market for foreclosed properties;

Legal and administrative issues: greater uncertainty as to lien priority; higher property-related transaction costs; higher and more uncertain costs of foreclosure and property recovery; and possible need to assume additional risks (e.g. title) that are not widespread in U.S., Canada and elsewhere.

Loan processing and loan demand issues: probable higher underwriting costs, lower volumes, and lower average loan amounts to insure; incremental risks attributable to high and uncertain inflation rates in combination with a potentially volatile mortgage instruments; and lack of standardized practices and documentation among lenders.

Notwithstanding all of the above, most of the key underlying risk variables that would determine the cost/price of mortgage insurance in Poland would resemble those that would apply anywhere. To begin with, the premium rate for mortgage default insurance in any national market would consist of the same four universal components as all other lines of insurance, i.e., (1) claims costs, (2) capital costs, (3) overhead costs, and (4) profit.

Primary factors determining the cost/price of mortgage default insurance in particular include the following:

Claims incidence or frequency rate. Typically defined as the percentage of insured loans underwritten in any given year which ultimately default *and* result in a paid insurance claim. This variable is based on a loan count.

Loss severity rate. Typically defined as the average percentage loss with respect to all those loans underwritten in any given year which result in a paid insurance claim. This variable is based on a dollar/zloty amount.

Cost of capital. As noted elsewhere, proper capital requirements for mortgage default insurance far exceed those of most personal and commercial lines. Capital costs, accordingly, play a much greater role in determining the costs and required premium rates for MI.

Underwriting costs. Included here are nearly all company operating costs except those directly related to the administration of claims and losses.

Specific cost variables, each relating to one of the above four areas, which would enter into the pricing of a mortgage default insurance offering would include:

Projected rate of return on investment portfolio;

Required rate of return on owners' equity;

Corporate taxes, including premium taxes, if any;

Terms of coverage, including risk-sharing provisions with insured lender (e.g., risk deductibles);

Projected average loan/mortgage insurance policy life;

Specific formula for determining capital requirements relative to outstanding risk exposure; and

Projected timing of all revenue and expense items over policy life, especially timing of claims.

Returning, then, to the overarching considerations of probable claims frequency and loss severity, the cost structure for mortgage default insurance would rest upon those risk variables which contribute significantly to: (1) the probability that loans having certain common risk-related characteristics will eventually default without curing, i.e., being reinstated as current; and (2) once becoming an incurable default, the likely extent, or severity of the eventual loss to the insurer.

Again, only evolving experience with home mortgage loans in Poland will produce the needed knowledge about which types of borrowers, properties and loans will result in greater or lesser default frequencies. To the extent that patterns common to other mortgage markets generally emerge in Poland, the following factors are likely to prove crucial:

Loan-to-value ratio and borrower equity (similar, but not identical factors);

Stability of mortgage instruments (e.g., fixed rate, adjustable rate, dual index); and

Owner versus renter occupancy.

Given the observations above about mortgage default insurance pricing, clearly it is not possible to project even a narrow range of probable premium charges at which mortgage insurance might be offered to mortgage lenders and borrowers in Poland. Short of that, however, the two examples shown in Exhibit 3 and Exhibit 4, based on a simple mortgage insurance pricing model, are offered to illustrate how, under significantly disparate risk circumstances, a prepaid mortgage insurance premium might vary from as low as 1.5 percent of the initial loan amount to as high as 11 percent of the initial loan amount. Holding all other variables constant, the two dominant pricing variables of claims frequency and loss severity rates are projected from a low of 5 percent frequency and 25 percent severity, to a high of 20 percent frequency and 75 percent severity, respectively.

Under the more favorable scenario (Exhibit 3), for example, one of every 20 loans insured in, say, the year 2000 eventually results in a claim. Then, assuming that the average original insured loan amount were 100,000 PLN, the average loss per claim would be 25,000 PLN, following property recovery and resale.

Under the less favorable scenario (Exhibit 4), one of every five loans insured during that same origination year eventually results in a claim. Assuming the same 100,000 PLN average insured loan amount, the average loss per claim then would be 75,000 PLN, following recovery of residual value from the property securing the loan.

Which, if either, of this divergent set of simplified loss assumptions would be the

more likely to occur, were mortgage default insurance to be offered in Poland as early as the year 2000?

The critical factor of claims frequency is extremely difficult to project without experience. Even with documented experience, a great deal depends upon future economic variables such as in-come, employment, inflation, and home prices. Also, as noted above, claims frequency even in a stable economic environment will vary considerably depending both upon the characteristics of the loans insured and upon the quality of the insured lender's loan underwriting and subsequent collections performance.

That said, chances are that claims incidence would fall somewhere within the range set forth by these two scenarios. Probable claims severity for a potential Polish mortgage default insurer might be a bit easier to evaluate in the next few years.

In more developed mortgage markets, total foreclosure costs typically would amount to less than the 25 percent loss severity rate projected under the more favorable of these two scenarios. Loss severities in more advanced mortgage markets, accordingly, tend to be driven to a greater extent by changes in home values following the origination of a loan and the placement of the mortgage insurance.

Explanation of Terms Used in Exhibits 3 and 4

Coverage: The top-down percentage of the loan that is covered by insurance. For example, with 40 percent coverage, the insurer would be liable for the first 40,000 PLN of losses on a 100,000 PLN loan.

Cumulative claim rate: Over the life of an insured loan portfolio or insured mortgage pool, the total number of claims as a percent of the total number of insured loans in the portfolio or pool.

Loss severity: The average amount of monetary losses on all claims in a portfolio or pool of loans as a percent of the total monetary amount of those loans insured which become claims.

Policy overhead: The average cost to the insurer for issuing and subsequently administering an individual policy of insurance on a single loan, exclusive of costs associated with the administration of insured loans which default and become claims.

Policyholders reserve rate: The aggregate amount of policyholders reserves held or required as a percent of the aggregate amount of insured loans outstanding.

Non-claim run-off rate: The percentage of a portfolio or pool of insured loans outstanding which experience a termination of insurance coverage for reasons other than a claim for loss by the insured lender. The two main reasons for non-claim termination are the payoff of the underlying loan, including when the subject dwelling is resold, and the discretionary termination of insurance coverage, if permitted, by the insured lender.

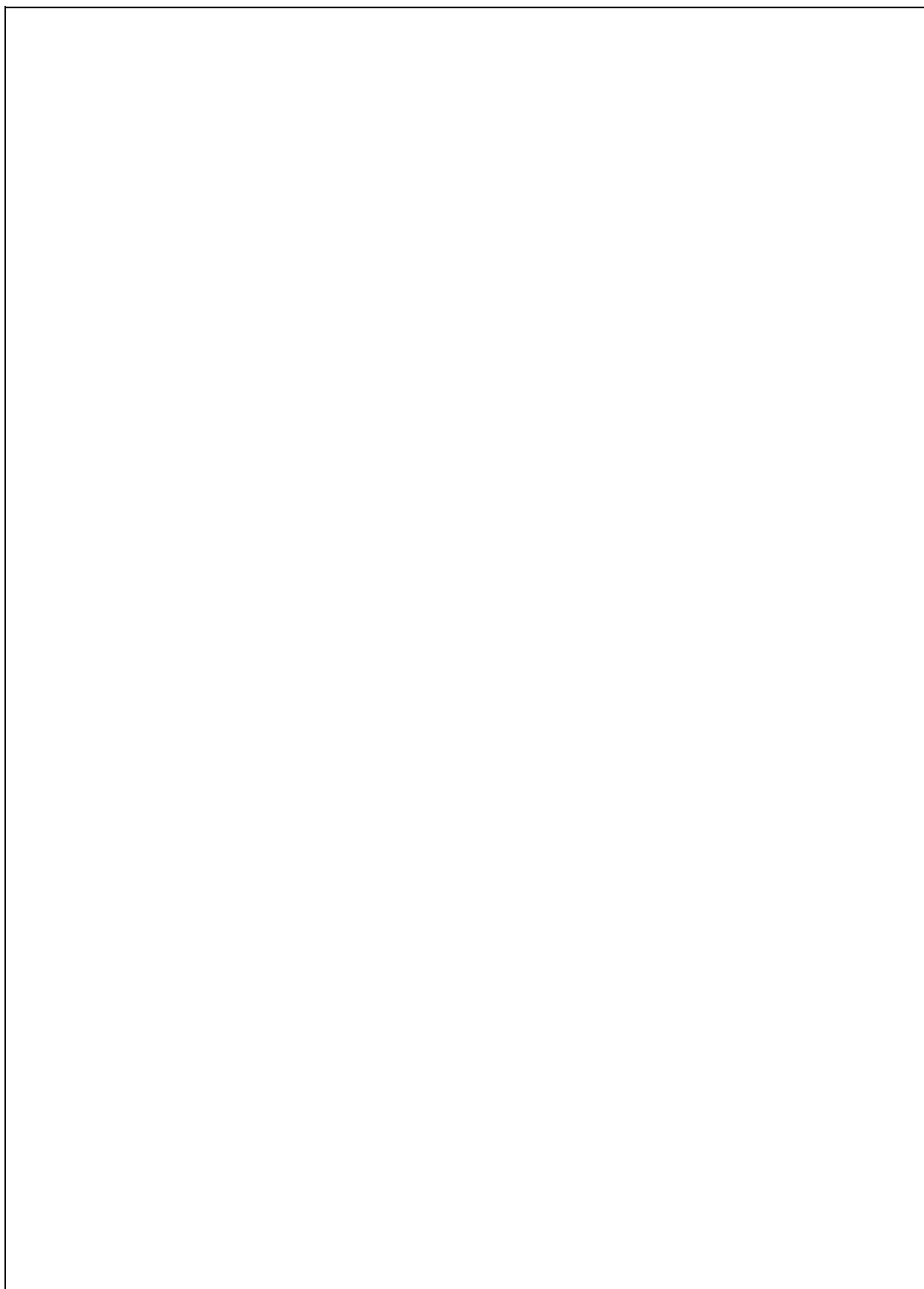


EXHIBIT 3Favorable Mortgage Default Insurance Pricing Assumptions
Illustrative Example

Average loan amount	100,000
Number of loans	100
Total amount insured	1,000,000
Coverage	50%
Cumulative claim rate	5%
Loss severity	25%
Investment rate of return	8.25%
Policy overhead cost	750
Income tax rate	0%
Premium tax rate	0%
Policyholders reserve rate	1.40%
Internal rate of return	8.25%
Mortgage rate	10%
Non-claim annual runoff rate	4%
Initial premium rate (basis points)	146
Annual renewal rate (basis points)	0

EXHIBIT 4

Unfavorable Mortgage Default Insurance Pricing Assumptions Illustrative Example

Average loan amount	100,000
Number of loans	100
Total amount insured	10,000,000
Coverage	50%
Cumulative claim rate	20%
Loss severity	75%
Investment rate of return	8.25%
Policy overhead cost	750
Income tax rate	0
Premium tax rate	0
Policyholders reserve rate	1.40%
Internal rate of return	8.25%
Mortgage rate	10%
Non-claim annual runoff rate	4%
Initial premium rate (basis points)	1103
Annual renewal rate (basis points)	0

In present day Poland, however, average loss severity is almost certainly going to accrue to the point where significant recovery from the security property is potentially in doubt because:

The foreclosure proceeding itself can require two years or longer;

Interest accruals (even using real rates) remain in double digits;

Legal and transaction charges continue to be quite high;

Lien priority remains uncertain, which raises the prospects of zero recovery for an unknown volume of loans; and

Ultimate property recovery, even after completion of foreclosure proceedings, could be difficult or costly.

Therefore, a projected average loss severity of 75 percent (which level probably would call into question the feasibility of mortgage insurance due to its high cost) may not be entirely unreasonable, given the current legal and cost framework of the mortgage system in Poland.

Based on the limited information available and experience with mortgage insurance in other countries, it is suggested that Poland's current mortgage market situation would require a prospective mortgage default insurer to charge a prepaid premium rate approaching ten percent of the original loan amount. This one-time charge assumes: (1) statutory capital requirements comparable to requirements in developed markets; and (2) no catastrophic reinsurance provided by the national government, such as discussed elsewhere in this report.

One final comment about mortgage insurance pricing: most of the MI pricing methods and considerations discussed above would also apply to the establishment of a risk premium for a mortgage-backed security issue, regardless of whether mortgage insurance, or some alternative type of credit enhancement, or no credit enhancement at all were to be included in such a structured securities transaction.

As to the question of who would ultimately pay for the cost of mortgage insurance, the answer is that one way or another the borrower/homeowner will pay this cost. The mortgage lender would purchase the insurance coverage and become the policyholder and direct beneficiary. The premium charge, however, inevitably will be passed through to the borrower. The benefit to borrowers is that, with mortgage insurance, they are given access to home purchase or home improvement financing that would not otherwise be available, or at least sooner than would otherwise be achievable.

The matter of how a given mortgage insurance premium may be passed through to the borrower would be relevant to affordability and, consequently, to potential market acceptance.

Mortgage insurance may be charged *by the insurer to the lender* in the form of a single lump sum payment at the outset, or periodically over the life of the coverage. For a developing market, the lump sum alternative probably is preferable, mainly for administrative efficiency.

Mortgage insurance may be charged, in turn, *by the lender to the borrower*: (1) as a direct pass-through; (2) in the form of a higher interest rate; (3) as a lump sum due at the closing; or (4) as a lump sum addition to the total mortgage loan amount, effectively financing the entire premium charge.

Of these alternatives, the one which effectively finances the premium for the borrower over the loan life probably is preferable in terms of affordability. In Poland, however, if monthly payment burdens are already extremely high, then one must return to the more basic issues of affordability as raised in Section 2.0 of this report.

5. PRECONDITIONS FOR MORTGAGE INSURANCE IN POLAND

Mortgage default insurance can bring enormous benefits in terms of growth and liquidity to an already-established housing and home mortgage finance market. For a private insurance initiative to succeed, however, a nation's housing and mortgage markets need to have reached a certain state of efficiency; otherwise, mortgage insurance will prove to be ill equipped to deliver on expectations. Risk capital will be difficult or impossible to attract; the level of premium charges to cover indicated risks would be unaffordable; losses will be unpredictable, and could be excessive and unmanageable; the startup guarantee program will not garner the necessary confidence and support of institutional lenders.

A proper launching pad for mortgage default insurance would need to include the following support features:

Enforceable contracts, including functional deed and lien registration systems. Both normal property transfers and property recovery and redispotion via foreclosure in the event of incurable default need to be doable within a reasonable cost and time frame.

Effective banking, mortgage banking and insurance regulation. The mortgage insurer must be able to rely on baseline standards for the

prudent management, safety and soundness of the lenders that would be its potential policyholders. Likewise, insured lenders and mortgage investors must have confidence in the ongoing financial solidity and integrity of the mortgage insurer that is providing essential credit enhancement to control their exposure to catastrophic losses.

Supportive public policy; no near term economic shocks. Supportive public policy should include a regulatory environment conducive to the writing of mortgage default insurance, including appropriate disincentives against lender adverse selection of risk (discussed further in Section 3.0 above). Macroeconomic policies should be conducive to reasonable stability in financial markets and competition and transparency in the housing and mortgage markets. A market and regulatory environment conducive to the development of a secondary market for residential mortgages would be desirable, though not absolutely essential.

Capable lenders. Loan originators and administrators need to be competent, experienced, and motivated to sustain loan quality.

Mortgage portfolio risk experience data. It is recommended that a minimum of five years of consistent, reliable data on home mortgage characteristics and risk experience is needed for a privately capitalized mortgage default insurer to enter the market with sufficient information to price and underwrite the product properly.

It is unlikely that the earliest years of needed experience data have been captured in a sufficiently useful manner by current originators in Poland because:

Lenders' loan volumes are relatively small;

Loan level data does not seem to be comprehensive or consistent among lenders;

Without broadly established and accepted foreclosure and eviction processes and an active home resale market, useful mortgage loss incidence and severity data would be nearly impossible to capture.

Available market data and credit information. Complete and reliable data at the local and metropolitan market level in all markets served needs to include the following:

Comparable home sales, including detailed property characteristics;

Economic data indicating market risk trends, e.g., population growth, employment; unemployment, personal income, home construction and sales activity; and

Credit history information on all applicant borrowers. As third party corporate guarantors of thousands of individual financial transactions, the mortgage insurer will lack the bank's frequent direct knowledge of a borrower's personal or financial circumstances, and will need to rely on an impersonal system of credit information.

Sufficient market size and breadth. To fulfill its role of spreading total risk among a large number of individual exposures, a mortgage default insurer should serve a diverse range of local and metro housing markets and, on a nationwide level, be able to write a large enough volume of insurance policies to spread its costs and achieve reasonable efficiencies. Minimum required volumes cannot be estimated with any precision, although success would be difficult to achieve unless total underwriting volume could be at least in the tens of thousands of insured loans after several years of startup growth.

Underwriting and Loan Closing Transaction Elements Crucial to Mortgage Insurance

In the course of conducting the Warsaw field interviews with various participants in the home purchase and financing transaction as it takes place in Poland today, some aspects of this transaction were observed which probably would raise some concerns on the part of a prospective mortgage default insurer entering the market. These concerns, as discussed below, do not run strictly to the insuring function *per se*, but also to the matter of potential risks to the uninsured lender over time.

Perhaps because of the absence, until recently, of a forum for articulating problems concerning mortgage finance, the concerns discussed herein have not been expressed as significant problems. It would, however, be appropriate for the Mortgage Lending Group of the Polish Banks Association to ascertain the extent to which these problems do exist.

The home mortgage loan closing is, obviously, both a legal and a financial transaction. To be fully enforceable (and, therefore, insurable) every legal and financial aspect of the loan closing must be perfected and documented. Furthermore, one or more legally and financially responsible parties to the transaction must be accountable, after the fact, in the event that a combined home purchase and financing transaction turns out to be materially different than it appeared to be at the outset specifically for whomever assumed the loss exposure in the event of default.

This perspective is crucial for the mortgage default insurer, which relies upon an integrated package of documentation provided by the lender in order to make an underwriting determination and to price the risk. The lender, however, also relies upon the performance and assembly of important risk-related information by other third parties. These parties include both professional service providers (e.g., the notary and the valuer) and, depending on the situation, the builder or seller, the real estate agent, the borrower's employer, and the buyer himself.

In Poland, not surprisingly, the respective roles, obligations and relationships and expectations among many of these parties relative to the home purchase and financing transaction are still emerging. Processes and documents are not yet standardized. All these things will develop in ways unique to Poland; yet some aspects of these roles and relationships will, over time, exhibit common attributes with housing and mortgage markets in other countries.

It is reasonable, for example, to expect that the incentive to minimize or transfer risk exposure, while optimizing profits, is somewhat universal. It is recommended, therefore, that full documentation of all risk-related aspects of the transaction and clear accountability among the numerous parties be established in order to avoid excessive or unanticipated risk exposure, and even possible market disruption at a later date.

Obviously, loan quality, including quality and reliability of documentation, will vary among individual lenders and over time. It appears that the risk-related aspects of the typical home purchase and financing transaction in Poland at this time include the following⁸:

Procedures which are well-documented and could be considered reasonably reliable by a mortgage insurer:

Mortgage loan amount and terms;

Transfer of legal rights and obligations;

Borrower's banking relationship/history with prospective mortgage lender;

Borrower's income and employment history as provided by the employer *via the borrower* and via income tax filings; and

Condition of the subject property, including certified suitability for

⁸his assertion is based on a limited number of interviews; refer to Annex D for interview references.

occupancy.

Procedures and data which are reasonably well documented, but the reliability of the information provided to the bank (and potentially the mortgage insurer) could be improved, such as property market valuation.

Procedures and data which are less well-documented such that serious risk exposures may accrue over time unless current procedures are strengthened:

Cash equity contributed by the borrower;
Actual home sales price;
Actual loan-to-value ratio;
Prior liens against

Borrower cash equity. Extensive experience in the U.S. and elsewhere indicates that the amount of cash equity, or down payment, contributed by the borrower toward a home purchase is a critical factor in determining the risk of default, foreclosure and ultimate loss to the lender or insurer.⁹ Therefore, it stands to reason that this central element of the home purchase and financing transaction warrants careful documentation and, further, that after-the-fact account-ability for the correctness of the reported borrower cash contribution extend beyond just the borrower. This type of documentation and accountability does not appear to take place in Poland at present when a home is purchased with mortgage financing.¹⁰

Although both the lender and the notary receive information from the buyer on the amount of down payment, sometimes corroborated by the seller, the following issues would need to be addressed:

There is no apparent accounting for the down payment in the overall documentation of the financed sale;

The passing of these funds are not presided over by either the notary or the lender;

Research studies on mortgage risk generally use the loan-to-value (LTV) ratio variable as a more readily measurable proxy for borrower cash equity. Value for purposes of home purchase financing typically is defined as the *lesser of* appraised value or sales price. Loan amount used for determining loan-to-value is, properly, the sum of all loans extended when more than one loan is involved. Consequently, the fractional of the combined loan-to-value ratio closely approximates the amount of borrower cash equity. Furthermore, experienced mortgage underwriters know that undisclosed borrowings in lieu of reported cash equity greatly increases the incidence and severity of foreclosure loss. Established mortgage underwriting procedures, accordingly, strongly discourage the use of undisclosed borrowings in lieu of cash equity.

Refer to Handorf, *Regulation and Supervision of Real Estate Lending* (August 1998).

After the fact, neither the lender nor the notary can confirm the amount of the down payment; and

Neither the buyer nor the seller are required to document or later be held accountable if the down payment were less than reported (or, in the extreme instance, nonexistent).

One means to remedy the lack of down payment documentation and accountability would be to require a tri-party affidavit to be executed at the closing by buyer, seller, and lender (or notary on behalf of the lender) that the reported amount of the down payment passed at the closing or was otherwise documented to have passed to the satisfaction of the lender or the notary.

Actual home sales price. It appears that reliable knowledge of the actual sales price of homes bought and sold in Poland, whether or not the sale is financed in part by a bank loan, may be possessed by only the buyer and the seller of the property. The reasons why the actual sales price may be a well-kept secret between these two direct parties to the sale are beyond the scope of this discussion. Suffice it to say that, if this information is not routinely and reliably made available to at least the valuer and the lender when there is a mortgage loan involved, several problems arise relating to the financing (and, therefore, to the potential insurance of that financing) including:

The amount of the down payment cannot be verified.

Because the proper determination of value is *the lesser of* appraised value or actual sales price, the loan-to-value ratio cannot be properly determined.

Valuers cannot develop a reliable comparable home sales database.

This information shortfall does not yet present a mortgage risk problem in Poland because, to the extent that true home sales prices are not able to be documented, the variances will be such that reported prices will be less than actual prices. Mortgage risk problems would arise, understandably, under circumstances when reported prices are greater than actual prices. Incentives to over-report sales prices would not occur until overbuilding were to take place in any particular local market and temporary oversupply were to then create downward pressure on builders asking prices accompanied by a simultaneous reluctance to concede that values actually are dropping. Overbuilding need not be a generalized event; one large project, poorly designed or located, can create the same type of adverse market pressures described and result in over-reported sales prices based on over-reported borrower down payments.

This phenomenon has been rather widespread in North America during regional economic recessions, and has caused substantial losses to lenders, investors, and mortgage insurers. One key to limiting these losses has been the ability to establish accountability when such under-reporting is discovered, following concentrated project foreclosures and losses.

The same type of tri-party affidavit described above can serve to verify, and establish account-ability for the proper reporting of the actual home sales price. (For an example of such an affidavit, see Exhibit 5.)

Actual loan-to-value ratio. As noted above, even if the loan amount and the appraised value are documented, in the absence of a reliably documented sales price, it is impossible to establish either value or loan-to-value ratio. Since loan-to-value ratio can, or should, underpin key pricing and regulatory benchmarks (for example, see the loan-to-value provisions in Poland's recently adopted regulation for mortgage banks), the matter of capturing validated loan-to-value ratios is significant.

The above-referenced affidavit can also serve to verify the actual loan-to-value ratio, based on the lesser of appraised value or actual sales price. Related thereto, it can also serve to disclose any additional credit (including unrecorded credit) that the seller/builder may be extending to the home purchaser to expedite the sale.

EXHIBIT 5

Buyer-Seller Affidavit Attesting to Essential Risk-Related Elements
of the Home Purchase-Loan Closing Transaction

In addition, the written agreement between the prospective buyer and seller, describing the property being sold and the agreed-upon terms of the sale, including the sale price, should be made a part of the lender's total loan package. If such agreements, or sales contracts, are not commonly used today in local markets throughout Poland, the Polish Banks Association may want to consider collaborating with the association representing real estate sales agents to seek to establish such a document in some standardized form, or at least to include certain standardized information about the intended sale. Both of these groups have a vital, though notably different, interest in assuring the knowledge and documentation of the actual home sales price.

Prior liens, status of title. Problems with the timely recording of liens and title, the ability to establish clear title, and concerns about the seniority of the home mortgage lien relative to both reported and unreported other liens are already recognized and well documented in other studies of Poland's current mortgage financing system.¹¹

Direct mortgage lenders interviewed in the course of this study do not appear to feel dangerously exposed on the matter of the clarity of underlying title. There were mixed views expressed on the degree of risk assumed by proceeding with the extension of credit on a home purchase prior to the formal recording of the mortgage, i.e., based upon the initial notice of the filing, as acknowledged by the court. Greater concern appears to be shared regarding the inability of the home mortgage lender to establish a higher ranking of lien priority, even given the recently adopted requirement that statutory liens must now at least be filed by the authorities.

Consequently, so long as there is no institutional secondary market for home mortgages, the question of whether title-related risks justify the use of insurance in Poland appears to be moot. The immediate risk to primary lenders, and therefore to a potential mortgage default insurer, is that the assertion of prior liens would exacerbate the severity of covered losses in the event of a foreclosure. Title risks, per se, apparently could be excluded from coverage for primary lenders.

Credit history of the borrower. Most borrowers purchasing their first home, according to those interviewed, have not been prior users of credit. This situation, of course, could change rapidly, given the rapid market inroads currently being made in Poland by credit card providers and automobile lenders.

If borrower applicants are already credit users, the mortgage finance system has to have a way of capturing credit history data, including credit cards, auto loans, etc., which extend beyond just the particular bank to which borrower is seeking mortgage credit. At least one credit reporting agency apparently is establishing itself in Poland at this time. The

Refer to *Building on Progress: The Future of Housing Finance in Poland*, Urban Institute Consortium. Prepared for USAID/Warsaw (7).

key requirement for a mortgage insurer would be that credit history is widely enough captured and is broadly accessible by all lenders so as to permit essential underwriting intelligence gathering. At present, such a foundation of consumer credit information does not exist.

6. SECONDARY MORTGAGE MARKET CONSIDERATIONS

Insurance needs and potentials expand considerably when the discussion of future home mortgage lending in Poland is extended from the primary mortgage market (borrower and lender) to the secondary market (borrower, lender, and secondary mortgage market purchaser of mortgages or mortgage-backed assets).

As a general premise, the further removed the ultimate holder of mortgage loans is from the direct business of mortgage lending, the more ways in which third party insurance (or alternative types of credit enhancement) will be sought to control perceived risks of nonpayment.

Thus, while the prospects for launching a viable mortgage default insurance program will, as discussed above, be driven largely by the soundness and efficiency of primary market practices (e.g., data availability, transfer and foreclosure time and cost, etc.) were a secondary market to emerge in Poland, it could provide significant impetus for the development of new mortgage-related insurance offerings.

For example, although private mortgage insurance first became widely available in the U.S. in the early 1960s, passage of federal legislation mandating the use of mortgage insurance on high LTV ratio loans sold in the newly emerging secondary market caused MI volume to explode from \$7 billion in force in 1970 to \$40 billion in force in 1975 and \$105 billion in force in 1980.

Secondary investor interest in default insurance protection will tend to increase further in the event that the investor is either purchasing or issuing mortgage-related paper in the form of a mortgage-backed security (MBS). In this instance, not only will the investor himself want built-in safety beyond that which is offered by the borrower, lender and property, but also in the case of regulated institutional investors such as pension funds the regulator or investment rating agency will be inclined to set investment quality standards that are most achievable through reliance on third party underwriting review and third party financial backing, i.e., mortgage default insurance.

Beyond default insurance, secondary investors also are likely to voice greater concerns about risks which direct lenders because of their greater familiarity with local conditions and individual borrower and properties are willing to live with. Such risk may

include those relating to title (i.e., title insurance), employee or agent malfeasance or error (i.e., blanket bond, professional liability insurance), or even flood/natural disaster (i.e., flood, special hazard insurance).

It is not clear whether some type of secondary market will evolve, or will be created through legislation and the political process in Poland. If this should take place, however, a new level of demand for third party credit enhancements, including insurance, would follow. That said, one cannot predict: (1) when and how rapidly a secondary market might occur; (2) how market volume will divide between primary, deposit-funded home mortgages and secondary investor portfolio purchases; or (3) whether distinct mortgage default insurance lines or alternative methods of credit enhancement will prevail.

It is possible, for example, to achieve credit enhancement results for secondary investors equivalent to that achieved through the use of insurance without there being any formal insurance. Poland may develop mortgage conduit organizations which purchase, package, securitize and sell mortgages/mortgage-backed securities where these securities carry credible guarantees that are issued by the same agency that converts the mortgages into securities. This same conduit organization could assume not only mortgage default risk, but also title and lender performance-related risks, with some type recourse (full or partial) extending back to the originating lender and/or other parties to the loan transaction.

Alternatively, mortgages can be pooled by originators or intermediaries and various types of structured financing can be devised which can serve to protect the institutional secondary investor in a similar manner to that of mortgage insurance, but in which case the primary lender becomes responsible for holding adequate reserves against loan losses for the entire pool, including the risk exposures sold in to the secondary investor.

Whether mortgage insurance or an insurance substitute was introduced, the issues and preconditions relating to mortgage default insurance discussed earlier in this report would still prevail. The responsible management of risk would still require experience data, accountability for the details of the loan closing, standardized lending practices, and a reasonable and efficient property transfer and loan foreclosure system.

It is important to understand the distinction between what mortgage default insurance can bring to the secondary, versus the primary mortgage market. In both cases the insurance brings a vehicle for growing the market, while controlling the risk. But, whereas in the primary market the specific target of the insurance is higher loan-to-value ratios and lower borrower cash requirements, insurance for the secondary market goes beyond just considerations of lending terms and stimulates the basic investor willingness to choose home mortgages among the competing investment choices offered. The end result: greater mortgage liquidity and expanded capital flows into the financing of housing.

When mortgage insurance is able to encourage secondary market capital to supplant primary deposit-driven mortgage lending, an ancillary benefit also tends to occur, namely better asset- liability matching. Pension fund and life insurance investors in mortgage-backed paper will be more concerned with cash flows than with liquidity; their type of capital will be more suitable for long term lending and more stable mortgage instruments than will deposit-driven lending.

In conclusion, to the extent that Poland's bankers and housing policymakers see advantages in encouraging the development of a secondary mortgage market to complement the future emergence of private pension funds, then it would make sense for positive, tangible steps to be taken today to create a regulatory and market environment that is conducive to the development of mortgage insurance programs. Such actions would seem to make sense today, even if one were to concede that the primary mortgage market is not yet ready for and may not even need at present these types of insurance programs.

7. OUTLOOK FOR MORTGAGE INSURANCE AND RELATED LINES IN POLAND

This section begins with observations on the current home mortgage lending environment in Poland as it relates to the possible near-term introduction of mortgage default insurance for the purpose of improving and/or expanding Poland's housing and residential lending markets. The section then concludes with some observations on positive steps that might be taken to encourage and accelerate the already-improving home mortgage lending arena in Poland with the use of well-chosen and well-designed mortgage credit enhancement tools.

The two overriding and not always compatible goals in making such choices, to be made by public policymakers, regulators and private market leaders will be:

To develop Poland's housing and home mortgage lending markets, and
To temper such growth with responsible management of mortgage credit risk

At this time, Poland is not yet ready for mortgage default insurance. Many of the preconditions for the successful introduction of a mortgage default insurance program, as discussed above, are not yet adequately established. In particular the following areas need to evolve further:

Property and mortgage registrations and foreclosures are too time- consuming, uncertain and costly for mortgage default insurance to function efficiently and at reasonable cost.

Routine property transfers with mortgage recordings still cost in excess of 10

percent of the home's sales price.

Foreclosures, when accomplished, are reported to take two years or longer, with accrued costs largely negating the value of the security.

Claims of prior lienholders seriously undermine the security position of purchase money mortgage holders.

Evictions are still almost unheard of.

Consequently, mortgage insurance today would have to be priced almost as if there were no loss mitigation through property recovery and resale, i.e., limited security. While there are promising signs of improvement in these areas, more than legislative and judicial reforms are needed. Lenders must be able to attest and demonstrate that the system actually is working to allow for cost-effective recovery of secured properties.

With regard to regulation of banking and mortgage banking, as for insurance regulation, some general lending classification criteria under which banks and mortgage banks would be either required or induced to use mortgage default insurance should precede any introduction of such a product.

Systems for providing needed data on sales comparables, local economic indicators, and borrower credit histories are still in their formative stages. The future on the data front looks promising, but for mortgage default insurance the essential foundations appear to be several years in the future.

Mortgage lenders appear to be rapidly adopting proven standards and procedures from other markets. What is missing at this stage is direct experience with the ups and downs of real estate markets and the complex interplay of the different players who will create, and the information which will signal, emerging adverse risks.

Mortgage risk experience data from loan portfolios seasoned over a number of years does not exist in most cases. While some lenders may be collecting most of the important data fields that will be needed for ongoing monitoring and analysis, there do not appear to be any common standards of data collection for this purpose.

Adoption of systems and procedures for the collection of detailed home sales price data, local economic and housing market data, and individual borrower credit history information all appear to be in early stages of

development. Positive movement appears to be occurring on all three of these fronts. Concerns are noted earlier in this report, however, about (1) the accuracy of recorded and reported home sales prices and (2) prospects for the open sharing of needed borrower credit information among competing lenders.

Mortgage default insurance can, under the proper circumstances, improve the workings of both primary and secondary mortgage markets. It can do so by offering strong incentives and guidance for the adoption of consistent standards and practices for originating and administering investment quality home mortgage loans. This type of insurance, however, is ill-equipped to compensate for major inefficiencies or institutional risks and impediments to the smooth workings of the market, such as currently prevails in Poland.

While the temptation might exist to use default insurance to paper over serious risks faced by lenders arising from a poorly performing mortgage finance system, the results most likely would be more damaging than beneficial, including exceedingly high MI premium rates passed through to borrowers, and a disincentive to fix the underlying problems.

What, then, is the outlook? What might be a realistic, positive scenario of events under which mortgage default insurance might evolve so as to benefit housing in Poland?

One early step which need not await progress on other fronts ought to be movement to standardize home mortgages throughout Poland, including data collection, documentation, and under-writing methods. Standardization does not mean that individual lenders must adopt lock-step policies and procedures, but rather, that reasonably consistent practices are voluntarily adopted. Thus, third parties, including eventual investors, can quickly and intelligently evaluate, compare and price loan packages offered in the market by different originating lenders.

Mortgage standardization might arise through early leadership by, and cooperation among, members of the Polish Banks Association. As a practical matter, only then would the stage be set for serious consideration of what, if any, form of mortgage credit enhancement will suit future market needs and regulatory requirements.

It is possible, for example, that a well-capitalized mortgage banking intermediary, with substantial credit risk recourse to a stable of lender-sellers (who may or may not also be owners) would be able to offer secondary purchasers a sufficient degree of self-generated credit enhancement so as not to require any third party financial guarantees provided by an insurance company.

If Poland's mortgage market were to evolve in this fashion without mortgage default insurance *per se*, other forms of ancillary insurance coverage might become standard requirements. For example, as discussed further in the next section, the mortgage bankers' blanket bond (BBB), if not required by regulation for secondary market sellers, would still be a likely eligibility requirement imposed by pension and other fund managers upon those who would sell them mortgage-related paper.

As another example, the advent in Poland of one or more mortgage banking intermediaries serving multiple lenders, should it occur, would generate a number of likely side-benefits, including:

- Progress toward establishing standards for data collection, documentation, underwriting, and management reporting;

- Sufficient concentration of volume to achieve operating efficiencies and to justify investment in mortgage technology;

- A convenient focal point for quality control and auditing functions;

- Effective risk dispersion; and

- The potential to secure an investment grade rating on paper issued.

All this is not to say that the mortgage market in Poland will, or should, mature without the useful introduction of mortgage default insurance. Rather, it is to suggest that, whether via natural evolution or planning and leadership among housing finance entrepreneurs, market intermediaries may well precede or even supplant the direct writing of mortgage default insurance as a separate, regulated line of insurance.

At some future point, however, mortgage default insurance as an independent line should be able to offer certain unique advantages, including:

- Superior risk dispersion;

- A truly independent third party evaluation and certification of loan quality;

- A sound means for the primary mortgage market to expand its underwriting reach without assuming excessive risks;

- Independent regulatory oversight; and

- More efficient use of risk-based capital, better access to reinsurance;

Prospects for the primary mortgage market alone to spawn a successful mortgage default insurance program in Poland, while not out of the question, are less probable than for the impetus to come from secondary market-related sources. That said, once a sound MI program were to be up and running in Poland, it could also serve certain needs of the primary market, particularly if encouraged by lender risk-based capital rules, as discussed earlier.

Details such as the specific design of mortgage default insurance or alternative credit enhancement products are beyond the scope of this report. Suffice it to say that there will be many product design options and that product features will reflect the differing credit enhancement needs of direct primary market lenders, versus those of secondary mortgage market investors.

Mortgage default insurance is *not* recommended for construction loans, particularly construction financing for larger scale housing development. Alternative types of guarantees, such as builder bonds (see next section) should be more suitable to address construction-related risks for lenders.

Poland's need for large amounts of mortgage capital to finance rehabilitation of the nation's *existing* housing stock may match, for at least the foreseeable future, its needs to finance new housing production. From a policy standpoint, finding capital to finance the upgrading of existing multifamily buildings and to provide ownership opportunities for households of modest means from the existing stock may have even greater urgency than new production.

Mortgage default insurance (again, possibly preceded by the type of credit-enhanced mortgage banking intermediation discussed above) should be considered an equally potent tool for attracting housing rehabilitation funds as for stimulating new production. While housing rehabilitation has not been a primary use of mortgage default insurance in other countries, both government and privately sponsored mortgage insurance programs directed at home improvement financing have been written in large volumes. Underwriting profitability and efficiency for this type of insured mortgage financing have been somewhat more difficult to achieve for a variety of reasons, but none that should serve to deter its development and use in Poland when the time and conditions are right.

Potential government support

The development of successful mortgage insurance programs in other countries has, for the most part, followed a historic pattern involving government sponsorship in the initial stages. Mortgage insurance has been viewed, correctly, as a useful public policy tool for purposes of economic stimulus, particularly with regard to housing construction and

related employment and to advance the goal of expanded home ownership. The nature of mortgage insurance risk was viewed by many to be such that only government's full faith and credit was suitable, because this activity was tantamount to guaranteeing the economy itself. Accordingly, government insurance served as a predecessor to the modern private mortgage insurance industries in the U.S., Canada, and Australia. In the U.S. and Canada, government mortgage insurance today still strongly competes in the marketplace against private insurers for direct insurance business from private lenders.

It is not clear whether such public-private competition is a reasonable vision for Poland. Mandates to reduce inflation, interest rates and budget deficits are being seriously pursued in Poland, and thus greatly increased budgetary resources for housing are unlikely in the short term. Furthermore, private financial institutions to the extent that those interviewed express the currently prevailing view do not seem to be enthusiastic about more direct government participation in the housing finance sector.

On the other hand, to the extent that mortgage default insurance may at some not-too-distant point in the future offer a useful vehicle to expand Poland's housing finance sector, one potential role of government in support of mortgage default insurance should at least be considered. A possible role would be one of ultimate, or catastrophic, reinsurer of qualified private mortgage insurers. Providing a long term financial guaranty to be relied upon by lending institutions, and eventually by pension funds and other secondary institutional investors, requires an unusually high degree of investor confidence, which may be difficult for private carriers alone to convey in the near or intermediate term. The chance of economic shock, real or perceived, may be too great. In addition, without some empirical database of risk experience, startup private insurers might have to over-reserve and over-price their product accordingly to compensate for the lack of experience and market perception of catastrophic risk potential.

The national government might be able to address this concern via an off-budget assumption of contingent liability. After establishing a regulatory and market environment in which private mortgage insurers could function effectively, subject to reserve requirements capable of withstanding severe regional or national economic recession, the government could add its own full faith and credit backup for institutional investors in insured mortgages. Such a guarantee would only be called upon in the event of full depletion and failure of the private insurer's own catastrophic reserves. In effect, the residual risk the government would be taking would relate to the failure of macroeconomic policies to sustain longer-term economic stability in Poland.

This type of government partnering and support could serve as a form of catalyst that would not entail excessive public sector interference with, or distortion of, natural market forces.

As an alternative to any type of government support for a mortgage insurance startup effort, it is also conceivable that a mortgage default insurance pilot project might be funded by an international donor organization, much as the Mortgage Fund was sponsored as a project in support of development of a secondary market for Polish lenders. The funding for a mortgage insurance pilot program might take the form of direct loan to capitalize an insurance risk fund at such time as the basic essential components of Poland's primary mortgage market were deemed sufficiently functional and stable.

Other mortgage-related insurance lines

As its home mortgage finance sector develops and matures, Poland's insurance industry will support this growth with a number of mortgage-related insurance products that will help lenders, borrowers and mortgage investors control their risks. In this mutually beneficial relationship, new insurance lines and variations of existing lines will be offered as market demand grows, and the offering of new insurance lines will create healthy incentives for assumptors of risk in the mortgage business to expand their market reach.

One standard insurance line where that relationship already has been established in Poland as it exists in many other countries is the case of homeowners' fire and extended coverage policies, which are routinely required and provided by Polish bankers on all residential properties financed.

About a dozen mortgage-related insurance lines that support housing are discussed in prior reports included as Annexes to this report. Very few of these lines are offered in Poland at present. For those lines that address mainly secondary mortgage market needs, of course, there would be no current demand; only the need to understand the future fit and plan for possible future application.

Mortgage default insurance already has been discussed at length above, with the conclusion that the market in Poland is not yet ready for such a product, but that policymakers and regulators with an eye toward the future should not take any actions which would foreclose or discourage the formation of a mortgage insurance venture if and when the time is right. This observation would apply to closely related products, such as cash flow insurance and financial guaranty insurance, which are also touched upon in the attached prior reports.

Which mortgage-related insurance lines are not currently active in Poland, but are ripe for broad application by Polish bankers (including prospective mortgage banking subsidiaries) at this time? The current mortgage lending environment appears to be suitable for much wider usage of at least the following three currently available insurance products:

Mortgage redemption life and disability insurance;

Mortgagor's (builder's) performance bond; and

Banker's (mortgage bank's) blanket bond (BBB).

Mortgage redemption life and (optional) disability insurance. This is a form of personal lines coverage which protects both borrower and lender in the event that the

breadwinner head (or heads) of the mortgagor's household dies or suffers long term disability. Since such a catastrophic event usually would curtail the affected family's income stream needed to make required mortgage payments, coverage provides significant protection for both the borrower and the lender.

In Poland, perhaps more than in more developed financial services markets, fewer prospective homebuyers are likely to be carrying such coverage already at the time they apply for home purchase or rehabilitation financing. Therefore the mortgage application interview would be an ideal point of sale for this product. The main impediments to customers acceptance, it appears, would be (1) a cultural resistance to the purchase of insurance, because under the prior regime, personal insurance was viewed more as a tax than as a value-added benefit; and (2) basic affordability.

The general resistance to personal insurance protection will be better overcome by persuasive marketing than by a sort of blanket mandate. Certainly there should be no regulatory mandate for mortgage life and disability insurance to accompany all home mortgages. Individual lenders can decide, on a cost-benefit basis, whether to require, or just to offer this coverage to their mortgage applicants.

It appears that, as a business opportunity for banks, mortgage life and disability insurance can be a source of ancillary income in the form of insurance agency commissions. This type of distribution channel has been commonplace among lenders in the U.S. for decades, although it is not universally permitted. An important caveat to note is that with affordability such a severe barrier to expansion of the homebuyer market in Poland at present, excessive selling commissions for this product could become self-defeating. In the U.S., for example, it became commonplace for the lender's agency commission to amount to one half or more of the first year's insurance premium.

The cost of the mortgage life component will, of course, be a function of the applicable actuarial tables in Poland. When the inflation rate in Poland is reduced and stabilized to the point where the dual index mortgage instrument is no longer needed, the sale of mortgage redemption life coverage may become expedited, because the amount of future benefits should be easier to predict, cost out and understand. The disability component is more a matter of the ability of the insurer to define, monitor and control the payment of appropriate claims.

No data exists yet in Poland to reveal what share of mortgage defaults are, or will be, caused by the borrower's inability to make mortgage payments as a result of loss of income due to death or extended disability. Data from other countries, such as the U.S. where the percentage of defaults caused by borrower death and disability is very low, may not be indicative of patterns in Poland.

In theory the borrower's purchase of mortgage redemption life insurance, by reducing the risk of default in the event of the borrower's death, should result in a corresponding reduction in the risk premium charged by the lender, thereby resulting in a zero net cost to the borrower for this added protection. In practice, the lender may not reduce its rate of interest to account for this marginal risk reduction; yet, the borrower may perceive the personal protection for his family to be worth the extra cost for insurance, including both the pure risk premium and the associated insurance underwriting and administrative overhead expense.

Whereas most mortgage redemption life and disability coverage, when claimed upon, provides a full payoff, or redemption, of the outstanding mortgage debt, lower cost alternatives are also possible whereby the policy picks up the periodic mortgage payments for a defined period of time to permit the borrower to adjust to altered or temporary circumstances, but which does not pay of the entire outstanding indebtedness.

Some banks in Poland provide standard mortgage redemption life insurance at present. While the companion disability product may be available, examples of its being written as part of the home-financing event were not encountered during the interviews undertaken for this study.

Mortgagor's (builder's) contract performance bond. This surety product, unlike a bank letter of credit or other forms of financial guarantee, insures the specific performance of all obligations under an outstanding construction contract; if the building contractor defaults, the surety will step in and complete the project.

Lenders in Poland report adverse experience with builder-developers of multifamily housing not delivering on their obligations to produce a finished product suitable for owner-occupancy. The builder's contract performance, or completion, bond, as commonly used for sizeable construction projects in other developing countries such as Brazil, Mexico and Argentina, should be able to help control this kind of loss exposure for both lenders and investors in Poland.

This type of coverage in Poland ought to provide not only a backup assurance that, in the event that the contracted builder failed, the bonding company would step in with a substitute contractor and resources to complete the original contract obligation, but also, the very process of requiring builders to produce such a bond would encourage improved standards of builder performance and an established, ongoing process for evaluating and screening builders.

While it is possible that larger banks in Poland would prefer to perform this function for themselves and assume the risks, smaller banks and mortgage banks may find it beneficial to require builder performance bonds for projects involving more than a certain

threshold number of dwelling units.

A standard form has been developed by the American Institute of Architects and is in widespread use in the U.S. and, recently, in Latin America.

International providers of builders' contract. A sample of this type of performance bond appears as Exhibit 6. This particular short form is a performance bond including Fidelity & Deposit (Zurich), AIG, and CIGNA International. Although the form references a nominal monetary value, the substance of the coverage provided is specific performance, i.e., completion of all obligations contained in a particular construction contract in the event that the primary contractor defaults on its obligation to perform and complete a particular construction project.

Unlike a letter of credit, which typically renews annually, the contract performance bond is noncancellable for the duration of a construction project, and even remains in force through any subsequent warranty periods. If any terms of the construction project are breached, the beneficiary—which may be the project owner and/or the lender—makes a claim with the surety. The claim cannot be a demand for cash, but only for specific performance.

Underwriting and pricing depends mainly on the creditworthiness of the builder and the size, complexity and risk of the proposed project. Premium rates vary enormously, but a premiere builder in a developed market might pay about 50 basis points per year for this type of coverage. Housing projects generally would be viewed as less risky than most industrial projects.

The contract performance bond currently is offered on at least a limited basis in Poland, with the two reported providers of such bonds in Poland being the largest domestic insurers, PZU and WARTA. However, this type of protection does not appear to be as widely used as it might be for the specific purpose of limiting lenders' risks in financing the construction of multifamily housing.

PZU and WARTA provide contract performance bonds mainly for clients who insure other kinds of risks with them and who, accordingly, are already well known by the insurer. The underwriting and pricing decisions in issuing a contract performance bond are based upon the completion of an insurance questionnaire and submission of the following documents:

Trade register statement not less than three months old;

Firm's tax identification number;

Tax office statement that all taxes have been paid properly and on time;

Social Security Office statement that all required premiums have been paid properly and on time;

Identification of all banks who have provided the applicant with loans and credits;

References from firm's primary banker(s); other general references;

Current balance sheet;

Copy of the contract to be guaranteed; and

A narrative self-prepared report about the applicant firm, including all contracts completed in the most recent 2-3 years, description of currently being performed, details of credits taken, including amounts, sources and uses, and main creditors.

Regarding prospective regulation, Poland's Consolidated Insurance Business Act of 1990 should be sufficient in its present form to permit the writing of builder's contract performance bonds by qualified insurance carriers under the Act's Non-Life Insurance Surety section.

Banker's (mortgage bank's) blanket bond, commonly referred to as BBB, comprises several combined types of coverage which may be tailored to suit a variety of specialized lender needs. For example, the universal bank in Poland may utilize a fairly standard banker's blanket bond policy, whereas a business unit specially engaged in residential mortgage lending might seek a blanket bond with special features applicable only to the business of mortgage banking.

BBB for banks, in a form similar to that offered in many other countries, is available in Poland today, although not widely used. The key features of a blanket bond policy are:

Errors and omissions coverage for employees, and possibly others acting on the bank's behalf, which protects against losses suffered by third parties as a result of mistakes or failures to act as required under established bank procedures. This coverage, as discussed in greater detail in the prior report, generally resembles professional liability insurance.

Fidelity coverage, which protects the bank and its customers and clients against losses caused by dishonest or fraudulent acts of employees, and possibly others working on the bank's behalf.

A key concern of mortgage lenders, which will grow as the business matures, will be the maintenance of various types of mortgage-related insurance types of coverage to protect the bank, and eventually, its secondary investors. Such types of coverage range from homeowners hazard insurance now, to mortgage default insurance possibly in the future. One of the many purposes of BBB coverage is to provide blanket coverage in the event that any specifically required mortgage-related types of coverage are, for whatever reason, allowed to lapse.

While the need for BBB or equivalent coverage for the mortgage lender is likely to become a requirement of secondary market investors, when they appear on the scene in Poland, there is good reason for Polish banks that are doing mortgage lending to consider acquiring blanket bond coverage even now. Exhibit 6 provides an itemized description of the Mortgage Bankers Blanket Bond special provisions, as developed over an extended period by the Mortgage Bankers Association of America for its members.

Somewhat related to the type of liability coverage for banks themselves that is provided by BBB, as private financing of cooperative housing grows, mortgage lenders may want to consider requiring a similar type of bond to be carried by the governing boards of cooperative properties which seek either development or rehabilitation financing.

Finally, whereas the above three types of coverage would seem to merit attention by lenders in the Polish mortgage market today, other types of coverage such as title insurance may not be appropriate, or even doable, in today's market. However, in anticipation of a future institutional secondary market for residential mortgages, particularly for the financing of large multifamily buildings, it may not be too soon to begin researching how best to provide investors with the type of protection offered by title insurance, given the difficulties of establishing clear title in some urban areas of Poland.

EXHIBIT 6

EXHIBIT 7

8. SELECTED REFERENCES

Act of 28 July 1990 on Insurance Activity, *Selected Legislative Instruments on the Insurance Business*. State Office for Insurance Supervision (1997).

Chiquier, Loic. *Dual Index Mortgages (DIMs): Conditions of Sustainable Development in Poland*. Prepared for USAID/Warsaw (February 1998).

Handorf, William C. *Regulation and Supervision of Real Estate Lending*. Prepared for USAID/Warsaw (August 1998).

Mayo, Stephen. *Land Markets, Prices, and the Economy*. Lincoln Institute of Land Policy (July 1998).

Urban Institute Consortium. *Building on Progress: The Future of Housing Finance in Poland*. Prepared for USAID/Warsaw (May 1997).

The Insurance Market in Poland from *Banking and Finance* (1997).

Note on translations: The translations of Polish laws and regulations are informal and should not be taken to represent precise statements of the law.